

fig. 3
Q1 5
1. (Amended) A method for programming a read-only memory cell including a transistor formed in a semiconductor substrate of a first doping type, the transistor having a drain and a source of a second doping type separated in the substrate by a conduction channel, the method comprising a step of:

contradoping a first region of the source such that the first region is of the first doping type to prevent a transistor effect from occurring, the first region [being adjacent to] directly contacting the conduction channel;

wherein the step of contradoping includes a step of contradoping only the first region of the source of the transistor such that a second region of the source remains of the second doping type.

fig. 8
Q2
3. (Amended) A memory, in integrated circuit form, comprising:
a plurality of transistors that form a corresponding plurality of memory cells, wherein each transistor has a drain and a source separated by a conduction channel, wherein a first transistor forms a corresponding programmed cell, and wherein the conduction channel and a first region of the source of the first transistor [are adjacent to each] directly contact each other and wherein the first region is contradoped so that the first region and the conduction channel are of the same doping type, and wherein the drain is not contradoped.

Q3 fig. 8
5. (Amended) A memory, comprising:
a plurality of cells formed in a substrate of a first doping type, the plurality of cells including a first programmed cell having a drain of a second doping type, a conduction channel of the first doping type, and a source, wherein the source includes a first region of the first doping type
5 [adjacent] directly contacting the conduction channel;
wherein the first region is the only region that is contradoped.

Q4 fig. 8
7. (Amended) A memory, comprising:
a plurality of cells formed in a substrate of a first doping type, the plurality of cells including a first programmed cell having a drain of a second doping type, a conduction channel of the first

Q4 5 doping type, and a source including non-conducting means directly contacting the conduction channel and being contradoped for providing a non-conducting response in the conduction channel to prevent a transistor effect from occurring between the drain and the source when predetermined voltages are applied to the first programmed cell to read the first programmed cell;
wherein the non-conducting means are the only region that is contradoped.

fig. 3
Q5 10 10. (Amended) A method for programming a cell, comprising a step of:
forming, in a substrate of a first doping type, a first transistor having a drain of a second doping type, and a source of the second doping type, such that a portion of the substrate forms a conduction channel between the source and the drain; and
contradoping only a first region of the source which directly contacts the conduction channel
15 to make the first transistor degenerate.

11. (Amended) The method of claim 10, wherein the step of contradoping includes the step[s] of:
dividing the source into the first region, and a second region[, wherein the first region contacts the conduction channel; and
contradoping only the first region that contacts the conduction channel].

REMARKS

In response to the Office Action mailed March 2, 1999, Applicant respectfully requests reconsideration. To further prosecution of this application, Applicant has amended the claims and submits the following remarks.

The Objection to the Declaration

In paragraph 1 of the Office Action, the Examiner asserts that the declaration filed with this case is defective. Particularly, the Examiner maintains that the city and foreign country of residence of the inventor as well as the post office address including a ZIP code of the inventor has not been